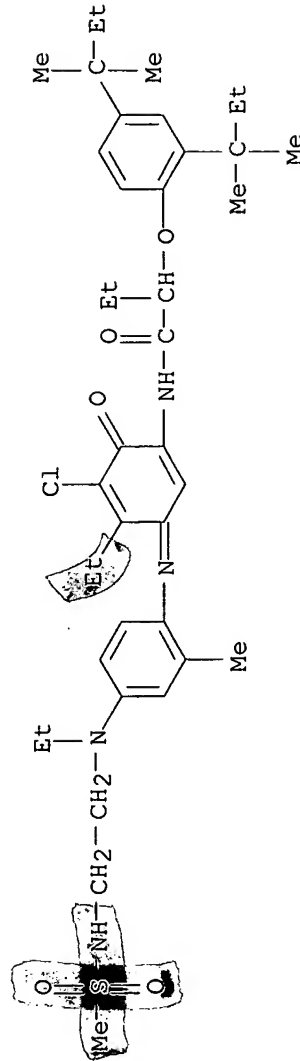



L7 ANSWER 1 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:1001100 CAPLUS <<LOGINID::20060824>>  
 DOCUMENT NUMBER: 143:307825  
 TITLE: Radiation-curable ink jet ink, ink set, image-forming method and ink jet recording device  
 INVENTOR(S): Makado, Satoru; Asatake, Atsushi  
 PATENT ASSIGNEE(S): Konica Minolta Medical & Graphic, Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 47 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

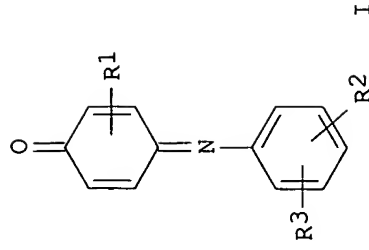
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005248066	A2	20050915	JP 2004-61925	20040305
PRIORITY APPLN. INFO.:			JP 2004-61925	20040305
OTHER SOURCE(S):			MARPAT 143:307825	
AB	The ink contains polymerizable compds., colorants, antioxidants, UV absorbers, and polymn initiators, where the colorants are oil-soluble dyes. An ink contained a cyan dye 3, an epoxy compound 20, an antioxidant 3, a UV absorber (2,4-di-tert-butyl-hydroquinone di-tert-Bu ether) 5, Adeka Optomer SP152 5, F475 0.02, and an oxetane compound the balance.			
IT 118150-18-8				
RL:	TEM (Technical or engineered material use); USES (Uses) (colorants; radiation-curable ink jet ink, ink set, image-forming method and ink jet recording device)			
RN 118150-18-8 CAPLUS				
CN Butanamide,				
2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]]- (9CI) (CA INDEX NAME)				



L7 ANSWER 2 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:429325 CAPLUS <LOGINID::20060824>>  
 DOCUMENT NUMBER: 142:459639  
 TITLE: Cyan low fluorescence dye for coated optical microsphere bead random array DNA analysis  
 INVENTOR(S): Chari, Krishnan; Qiao, Tiecheng A.;  Donald R.; Chen, Samuel  
 PATENT ASSIGNEE(S): Eastman Kodak Company, USA  
 SOURCE: U.S. Pat. Appl. Publ., 14 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005106711	A1	20050519	US 2003-713165	20031114
PRIORITY APPLN. INFO.:			US 2003-713165	20031114
OTHER SOURCE(S):		MARPAT 142:459639		

GI



AB The present invention provides a dye for coloring polystyrene microsphere beads cyan, i.e.--red light absorbing, with colorant materials that have the property of very low fluorescence intensity such that the resultant colored microspheres do not substantially fluoresce when excited by visible light.  
 The present invention also provides a coating composition for making a protein microarray, the composition comprising a gelling agent or a precursor to a gelling agent and microspheres; the microspheres containing a dye [I; R1 = H, Cl, Br, I, (substituted)alkyl, alkylamino, arylamino, acyl, nitrile, alkoxy, aryl,

heteroaryl, sulfone, sulfamoyl, sulfonamido, amido; R2, R3 = H, Cl, substituted amino, amido, alkoxy, (substituted)alkyl].

IT 851537-19-4P

RL: ARU (Analytical role, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)

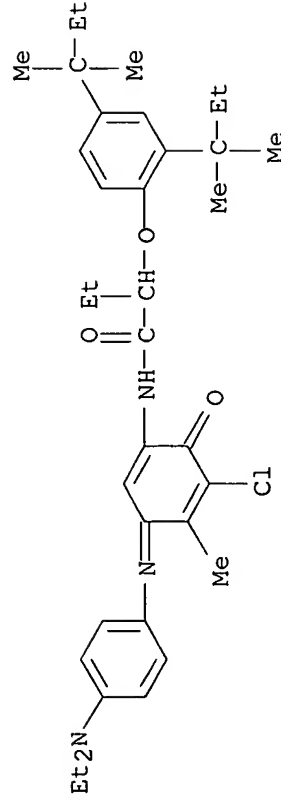
(CD-1; cyan low fluorescence dye for coated optical microsphere bead random array DNA anal.)

RN 851537-19-4 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-3-[[4-(diethylamino)phenyl]imino]-4-methyl-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX

NAME)



IT 851537-22-9P

RL: ARU (Analytical role, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)

(CD-2; cyan low fluorescence dye for coated optical microsphere bead random array DNA anal.)

RN 851537-22-9 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]phenyl]imino]-4-methyl-6-oxo-1,4-

cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)

— 23 —

L7 ANSWER 3 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:235200 CAPLUS <LOGINID::20060824>>  
DOCUMENT NUMBER: 142:325964  
TITLE: Water-thinned inks and ink-jet recording method using them for forming images with  
excellent light, oxidative gas, and ink spread  
resistance  
INVENTOR(S): Asatake, Atsushi; Ninomiya, Hidetaka  
PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 48 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

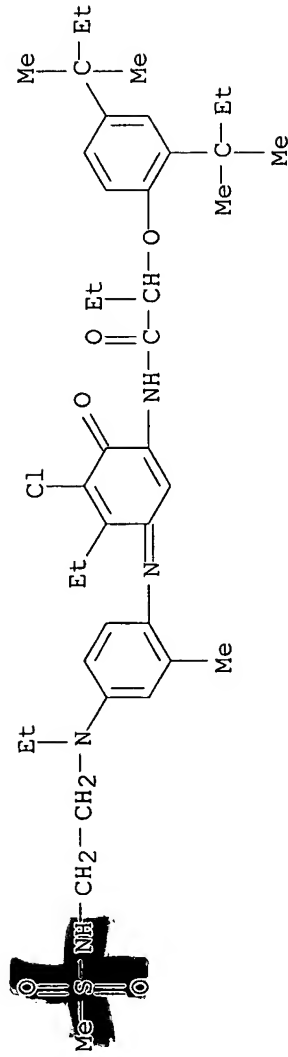
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005068267	A2	20050317	JP 2003-298427	20030822
PRIORITY APPLN. INFO.:			JP 2003-298427	20030822

OTHER SOURCE(S): MARPAT 142:325964  
AB The inks contain colored core-shell microparticles containing oil-soluble dyes and polymers, wherein discoloration inhibitors (UV absorbers or antioxidants, preferably) are contained in the cores and the polymers may be selected from those bearing acetal, carbonate ester, or OH groups and vinyl polymers.

RL: TEM (Technical or engineered material use); USES (Uses)

RN 118150-18-8 CAPLUS

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]-(9CI) (CA INDEX NAME)



ACCESSION NUMBER: 2003:10718 CAPLUS <LOGINID::20060824>

**Evaluation**

chromatography/mass spectrometry instruments and the development of spectral libraries

Laboratory of the Government Chemist (LGC Limited), Teddington, TW11 0LY, UK

CODEN: RCMSEF: ISSN: 0951-4198

DOCUMENT TYPE: JOURNAL

AB Mass spectral libraries provided by NIST.

electrospray ionization (ESI) and atmospheric chemical ionization (ApCI) sources have the capability to

induced dissociation (CID), and in-source CID libraries can be created. Due to the variation in

manufacturers, the production of reproducible in-source CID spectra that can be used in libraries for all

instrument types is not a trivial task. To date,

the evaluation of the production of in-source CID libraries has tended to focus on similar instruments from one manufacturer. The studies have also tended to focus on specific compound classes, with a limited mol. weight range. This report describes the findings from the study of protocols for the creation of mass spectral libraries using ESI in-source CID on six instruments from four different manufacturers. The overall goal was to create a spectral library for the identification of unknowns. The library could then be applied across all manufacturers' electrospray instruments. Two different exptl. protocols were attempted. The 1st used a tuning compound to establish standard ESI source conditions, with fixed fragmentation potentials. The 2nd involved the attenuation of the [M + H]<sup>+</sup> ion to a known degree. A diverse range of compds. (pharmaceutical, photog., pesticides) was tested to establish the reproducibility of the spectra on the six instruments. Both protocols produced spectra on the various instruments that in many cases were very similar.

In other examples, the spectra differed not only in their relative ion abundances, but also in terms of the spectral content. Important observations regarding the effect of ion source design are also reported. The degree of spectral reproducibility was calculated off-line by comparing the five most abundant ions (20% for each ion that matches) from each spectrum on each instrument. This approach was adopted, as the authors do not possess a software package that met the authors' requirements for spectral comparison. Match factors (% fit) were calculated by comparing each spectrum against the spectra recorded for the same compound and then for all other compds., on each instrument. The % fit values derived by the off-line approach gave a clear view of the spectral reproducibility from instrument to instrument and also discriminated the spectra of the various compds. from each other. The applicability of this approach was tested using a blind trial in which several compds. were presented as unknowns, their in-source CID spectra recorded and the five-ion approach used for identification.

IT 118150-18-8

RL: ARU (Analytical role, unclassified); ANST (Analytical study)

(test compound; evaluation of protocols for reproducible electrospray in-source collisionally induced dissociation on various liquid chromatog./mass

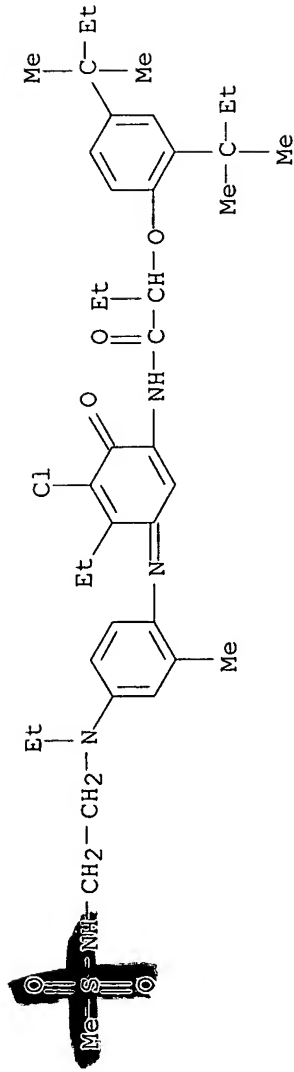
spectrometry instruments and the development of spectral libraries)

RN 118150-18-8 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-

cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:  
IN THE RE FORMAT

12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

L7 ANSWER 5 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:750912 CAPLUS <<LOGINID::20060824>>  
DOCUMENT NUMBER: 137:270210

TITLE: Information display

INVENTOR(S): Kokeyuchi, Noriyuki; Shimizu, Hiroshi; Hiyama, Kunimasa; Kitani, Ryuji

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
CODEN: JKXXAF

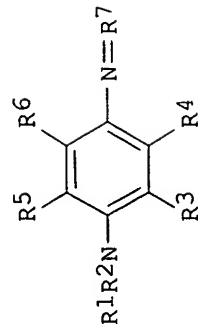
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002287177	A2	20021003	JP 2001-86946	20010326
PRIORITY APPLN. INFO.:			JP 2001-86946	20010326
OTHER SOURCE(S):			MARPAT 137:270210	



I

AB The display comprises I (R1-7 = H, substituent) and [CH2 = CH-S(O)2-n-A (A = ester, OH, amide. C1-6 alkylene; n = 2, 3), where the electrification particle is moved by elec. field for recording information in a partitioned box.

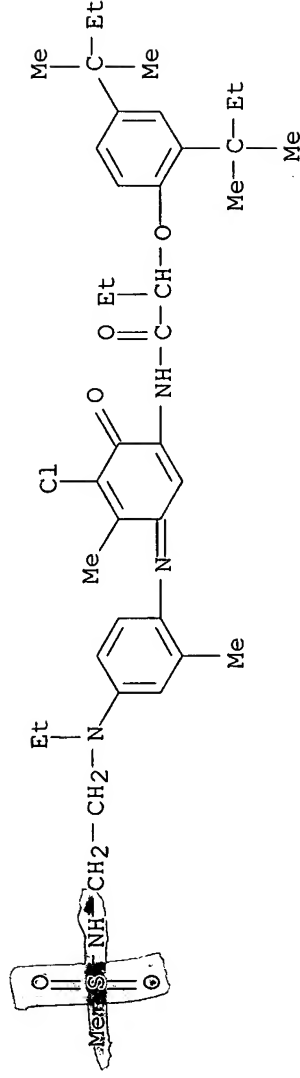
IT 111364-54-6

RL: DEV (Device component use); USES (Uses)  
(information display)

RN 111364-54-6 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-3-[[4-[ethyl 2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-4-methyl-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



L7 ANSWER 6 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:691409 CAPLUS <LOGINID::20060824>>  
DOCUMENT NUMBER: 137:234156  
TITLE: Ink-jet ink composition containing oil-soluble dye and amine compounds for high  
photographic image quality papers  
INVENTOR(S): Yamada, Masato; Yabuki, Yoshiharu  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 32 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002256191	A2	20020911	JP 2001-265968	20010903

PRIORITY APPLN. INFO.:  
OTHER SOURCE(S):

JP 2000-398058 A 20001227

MARPAT 137:234156

AB Title ink contains aqueous dye dispersion manufactured by dispersing an oil-soluble dye, an amine compound, and high b.p. organic solvents in aqueous medium. The amine compound is a compound represented by R1-[NR4]n-X-NR2R3, wherein X is CO, CS, or SO2; R1 is alkyl, aryl, or heterocyclic group; R2, R3, and R4 independently represent H, alkyl, or aryl group; n = 0 or 1. Thus, an ink composition was formulated by admixing an oil-soluble dye 5.00, high b.p. organic solvents 10, additive 0.625, a sulfonamide compound 20.0 g/L, and other ingredients in water. The obtained odorless ink exhibits excellent printing property, handling property, dryability, discharge stability, color reproducibility, water resistance, and light fastness.

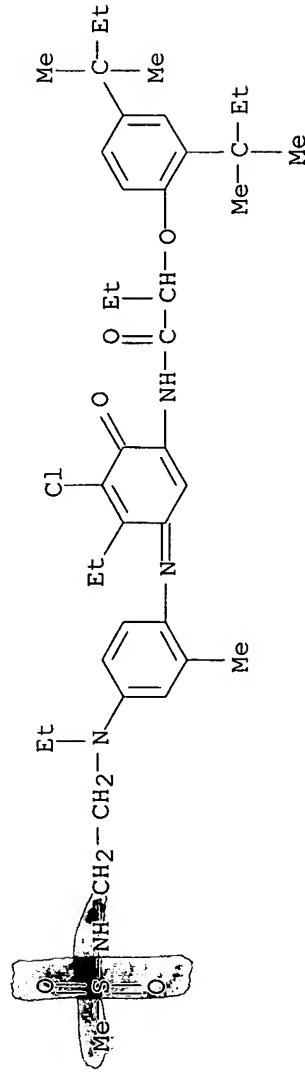
IT 118150-18-8

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(oil-soluble dye; formulation of ink-jet ink composition containing oil-soluble dye for high photog.  
image quality papers)

RN 118150-18-8 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



L7 ANSWER 7 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:423011 CAPLUS <<LOGINID::20060824>>  
DOCUMENT NUMBER: 137:13284

TITLE: Ink-jet inks, their manufacture, and printing process using the same  
INVENTOR(S): Yamanouchi, Junichi; Ishizuka, Takahiro; Yabuki, Yoshiharu  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 80 pp.

CODEN: JKXXAF

Patent

DOCUMENT TYPE: Japanese  
LANGUAGE:

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002161225	A2	20020604	JP 2001-230507	20010730
US 2002143079	A1	20021003	US 2001-922842	20010807
US 6800673	B2	20041005		
PRIORITY APPLN. INFO.:			JP 2000-238817	A 20000807
			JP 2001-230507	A 20010730
OTHER SOURCE(S):		MARPAT 137:13284		

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The ink-jet inks are prepared by mixing (A) emulsions of water-insol. ionic group-containing polymers with (B) water-based dispersions of colorant fine particles containing hydrophobic high-b.p. organic solvents with b.p.  $\geq 150^\circ$  and oil-soluble dyes. The surface of dispersoids of B may be coated with polymers of A. The oil-soluble dyes may be shown as I (X = residue of color photog. coupler; A = NR4R5, OH; R4, R5 = H, aliphatic, aromatic, heterocyclic; B1 = :CR6, :N; B2 = CR7:, :N; R2, R3, R6, R7 = H, halo, aliphatic, aromatic, heterocyclic, CN, OR51, SR52, CO2R53, OCOR54, NR55R56, CONR57R58, SO2R59, SO2NR60R61, NR62CONR63R64, NR65CO2R66, COR67, NR68COR69, NR70SO2R71; R51-R71 = H, aliphatic, aromatic; R2 and R3, R3 and R4, R4 and R5, R5 and R6, R6 and R7 may be bonded to each other and form ring). The oil-soluble dyes may be azo dyes shown as II [A = residue of 5-membered ring diazo component ANH2; as for B1 and B2, B1 = :CR1 and B2 = CR2:, or one is N and the other is :CR1 or CR2:, R5, R6 = H, aliphatic, aromatic, heterocyclic, acyl, CO or SO2 which is bonded to alkoxy, aryloxy, or NH2 (these groups may be further substituted); G, R1, R2 = H, halo, aliphatic, aromatic, heterocyclic, CN, CO or OCO which is bonded to OH, NH2, alkoxy, or aryloxy, acyl, OH, alkoxy, aryloxy, siloxy, acyloxy, heterocyclic oxy, amino which includes NHPH, acylamino, NHCONH2 or NHSO2NH2 which may be substituted with alkoxy or aryloxy, NO2, alkyl- or arylthio, SO2 which is bonded to alkyl, aryl, NH2, or OH, heterocyclic thio (these groups may be further substituted); R1 and R5, or R5 and R6 may be linked to each other and form 5- or 6-membered ring]. The oil-soluble dyes may be phthalocyanines shown as III [X1-X4 = SO21, SO2Z1, or SO2N21R22; Z1 = alkyl, cycloalkyl, alkenyl, aralkyl, aryl, heterocyclic (these groups may be substituted); R21, R22 = H, any group given for Z1; R21  $\neq$  R22 = H; Y1-Y4 = monovalent substituent; al-a4, bl-b4 = 0-4 integer; a total of al-a4  $\geq 2$ ]. The inks produce vivid images regardless of type of papers.

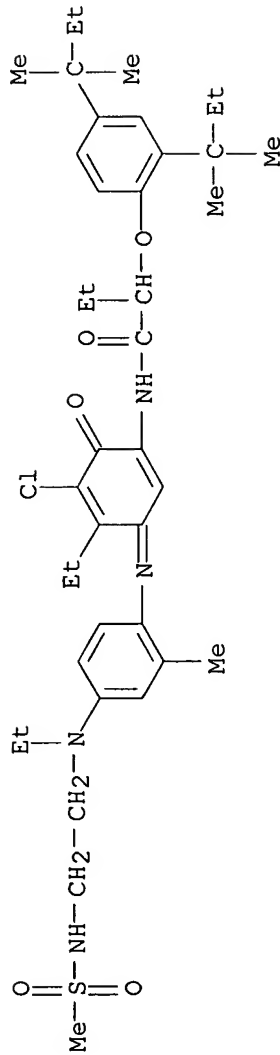
IT 118150-18-8

RL: TEM (Technical or engineered material use); USES (Uses)  
(water-based ink-jet inks prepared by mixing water-insol. ionic group-containing polymers with  
dispersions containing organic solvents and oil-soluble dyes)

RN 118150-18-8 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



L7 ANSWER 8 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:305895 CAPLUS <<LOGINID::20060824>>  
DOCUMENT NUMBER: 136:327137

TITLE: Water-thinned ink compositions for jet printing

INVENTOR(S): Yamanouchi, Junichi; Yamada, Masato; Yabuki, Yoshiharu

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 68 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002121414	A2	20020423	JP 2001-211417	20010711
US 2002107301	A1	20020808	US 2001-905859	20010717
PRIORITY APPLN. INFO.:			JP 2000-216511	A 20000717
			JP 2001-211417	A 20010711

OTHER SOURCE(S): MARPAT 136:327137

AB The ink comps. contain colored fine particle dispersions containing hydrophobic organic solvents (b.p.  $\geq 150^\circ$ ) and oil-soluble dyes, and polymer

latexes. Thus, a dispersion prepared from an oil-soluble dye, Na dioctylsulfosuccinate, (MeC6H4O)3PO, (Me3CCH2CHMeCH2O)3PO, and UV absorbents was mixed with diethylene glycol, glycerin, Surfynol 465, urea, H2O, KOH, and acrylic acid-butadiene-styrene copolymer latexes to give a light magenta ink showing good printability, dryability, lightfastness, and water resistance.

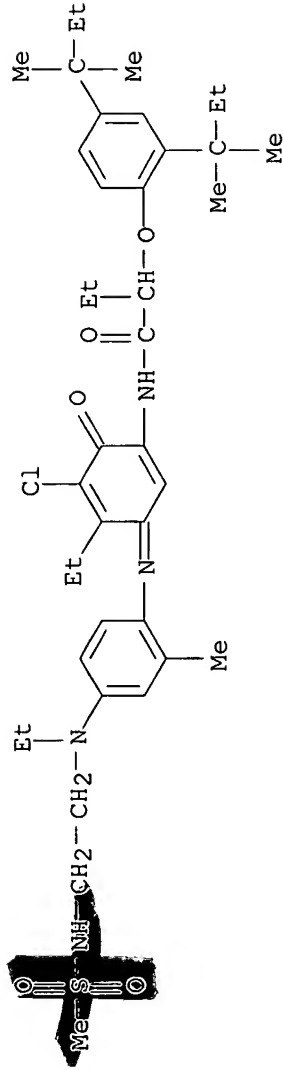
IT 118150-18-8

RL: TEM (Technical or engineered material use); USES (Uses)  
(water-thinned jet printing inks with good dryability, lightfastness, and water resistance)

RN 118150-18-8 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl{2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-thylphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



L7 ANSWER 9 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:129246 CAPLUS <<LOGINID::20060824>>

DOCUMENT NUMBER: 136:169122

TITLE: Colorant aqueous emulsions with good dispersibility, their water- and light-resistant jet printing inks, and printing method using them

INVENTOR(S): Ishizuka, Takahiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 33 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

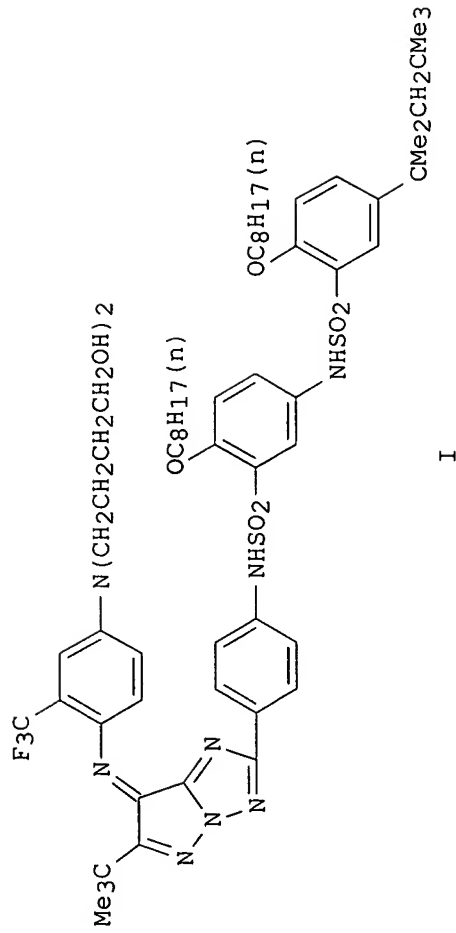
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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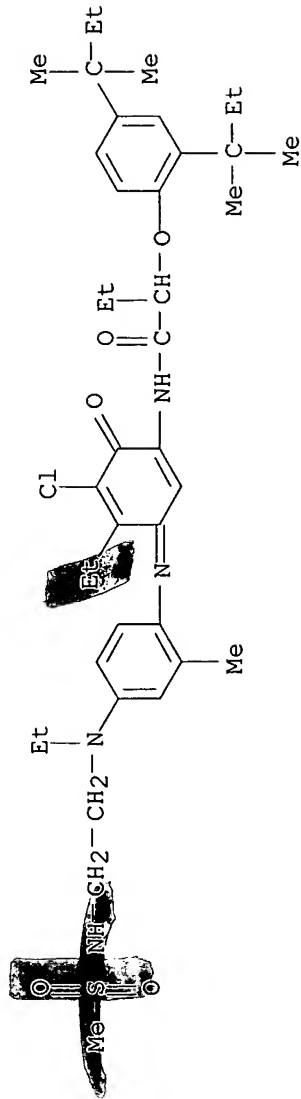
JP 2002053766 A2 20020219 JP 2000-241638 20000809  
 PRIORITY APPLN. INFO.: JP 2000-241638 20000809  
 OTHER SOURCE(S): MARPAT 136:169122  
 GI



AB The emulsions comprise oil-soluble dyes and vinyl polymers having functional groups to form colorants by oxidation coupling with aromatic primary amines. Thus, an aqueous emulsion containing Bu methacrylate-2-carboxyethyl acrylate-acrylamide chloropyrazolotriazole derivative copolymer Na salt and an azomethine dye (I) showed particle size 92 nm and stable dispersion.

IT 118150-18-8

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (dye; colorant aqueous emulsions for water-, light-, and clogging-resistant jet printing inks using vinyl polymer containing coupling groups)  
 RN 118150-18-8 CAPLUS  
 CN Butanamide,  
 2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]]- (9CI) (CA INDEX NAME)



L7 ANSWER 10 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2002:113898 CAPLUS <<LOGINID::20060824>>  
 DOCUMENT NUMBER: 136:169115  
 TITLE: Inks containing oil-soluble dyes and unsaturated compounds, and ink-jet printing using them

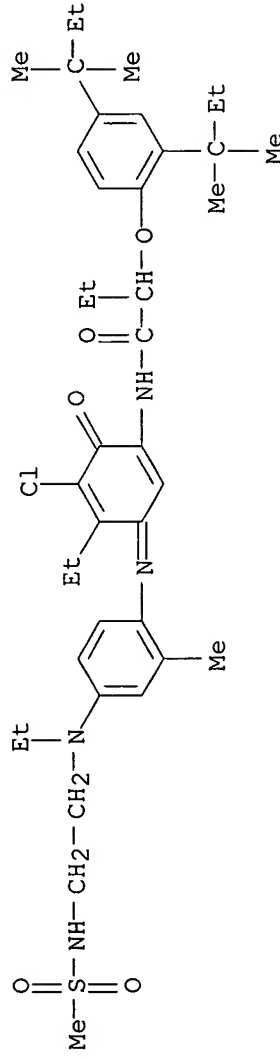
INVENTOR(S): Naruse, Hideaki; Omatsu, Tadashi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 42 pp.  
 CODEN: JKXXAF

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002047437	A2	20020212	JP 2000-309683	20001010
US 2002112641	A1	20020822	US 2001-861635	20010522
US 6716277	B2	20040406		
PRIORITY APPLN. INFO.:			JP 2000-151105	A 20000523
			JP 2000-309683	A 20001010

OTHER SOURCE(S): MARPAT 136:169115  
 AB The inks contain (a) oil-soluble dyes dissolved into high-boiling organic solvents and dispersed into aqueous media and (b) compds. having  $\geq 1$  C-C unsatd.  
 bond other than Ph group. The inks provide water-resistant high-quality images. Thus, a light magenta ink was manufactured using a dye emulsion containing pyrazolotriazole dye, dioctyl sulfosuccinate, tritolyl phosphate, tris(2,4,4-trimethylpentyl) phosphate, and UV absorbers.  
 IT 118150-18-8  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink-jet printing inks containing oil-soluble dyes, unsatd. compds., and high-boiling solvents)  
 RN 118150-18-8 CAPLUS

CN Butanamide,  
2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-thyphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



L7 ANSWER 11 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:113243 CAPLUS <<LOGINID::20060824>>  
DOCUMENT NUMBER: 136:169113  
TITLE: Color microparticle dispersions, ink-jet recording inks, and recording process therewith  
INVENTOR(S): Ishizuka, Takahiro; Yamanouchi, Junichi  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002047440	A2	20020212	JP 2000-234305	20000802
PRIORITY APPLN. INFO.:			JP 2000-234305	20000802
OTHER SOURCE(S):			MARPAT 136:169113	
AB The microparticles contain oil-soluble dyes and vinyl polymers prepared by polymerization of				
H2C:CR1111(X1)q(L2)r(X2)sOP(O)(OR22)OR21 [I; R11 = H, C1-4 alkyl, C1; L1				
= O, CO2, OCO, CONR12, (un)substituted phenylene; X1 = CH2, CHR13, CR13R14, CH2CH2O, CH2CHR13O, CHR13CH2O,				
(un)substituted arylene, (un)substituted				
cycloalkylene; L2 = O, CO, CO2, OCO, CONR12, NR12CO, NR12CO2, NR12CONR15; X2 = CH2, CH2CHR13, CHR13CH2,				
(un)substituted arylene, (un)substituted				
cycloalkylene; q ≥ 1; r = 0-1; s = 0-18; R12, R15 = H, (un)substituted alkyl, (un)substituted aryl; R13,				
R14, R21, R22 = (un)substituted alkyl,				

(un)substituted aryl]. Thus, adding NaOH to a mixture of Me2CHOH 4, tert-BuOH 6, a 50:40:10 I-Bu

methacrylate-2-carboxyethyl acrylate copolymer (II; R11 =

Me; L1 = CO2; X1 = CH2; q = 2; r, s = 0; R21, R22 = Ph) 1.5, and an oil-soluble dye 0.5 part to neutralize

II, heating to 80°, adding 30 parts H2O to the mixture, and evaporating gave color microparticle dispersion having particle size 32 nm and good dispersibility.

IT 118150-18-8

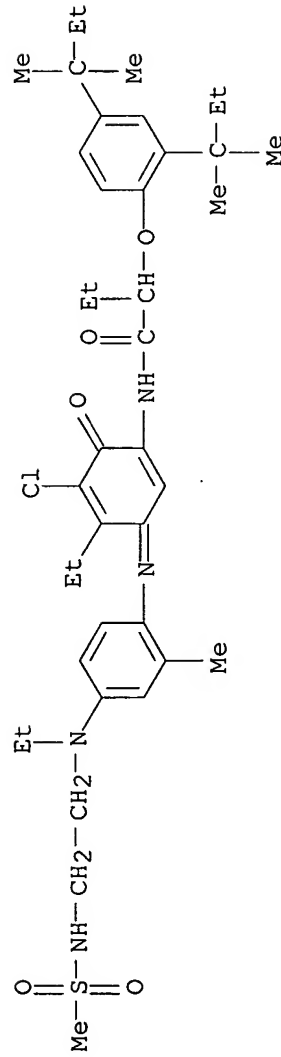
RL: TEM (Technical or engineered material use); USES (Uses)

(color microparticle dispersions with good dispersibility for ink-jet inks)

RN 118150-18-8 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



L7 ANSWER 12 OF 31

CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:900445 CAPLUS <<LOGINID::20060824>>

DOCUMENT NUMBER: 136:21064

TITLE: Ink composition and ink jet recording technique

INVENTOR(S): Naruse, Hideaki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 34 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

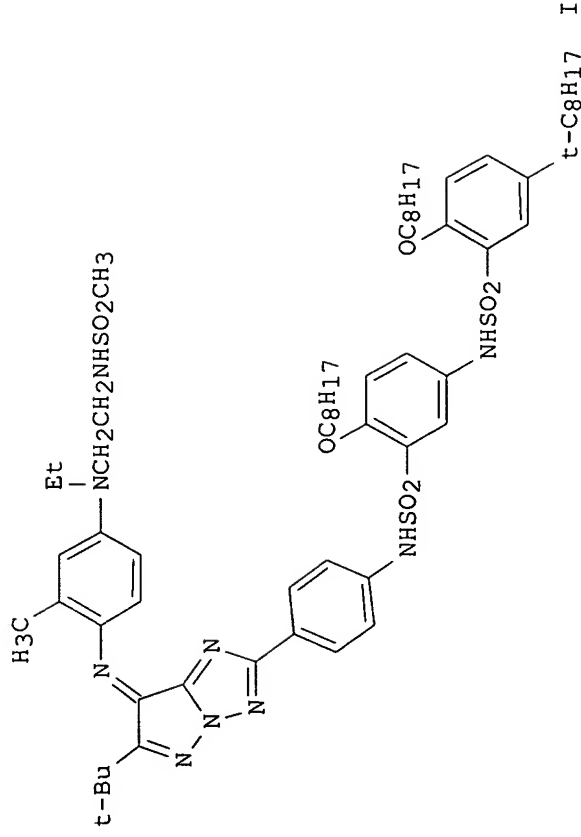
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001342387	A2	20011214	JP 2000-320683	20001020

PRIORITY APPLN. INFO.:  
OTHER SOURCE(S):  
GI

JP 2000-95681 A 20000330

MAPPAT 136:21064



AB The water dispersion ink with good picture quality and waterproofing comprises R1R2R3N, R4R5S:(O)n, or R6R7R8O(O)m, which is dissolved in aqueous emulsions containing organic solvents having b.p.  $\geq 150^\circ$  and a dye, wherein R2-R8 are aliphatic groups, etc., m, n=1 or 2. Thus, a light magenta ink set from dye I was mixed with (CH3)2N(CH3)N(CH2)4OC6H3(t-C5H11)2 to give an ink show good printing, drying and water-resistance properties.

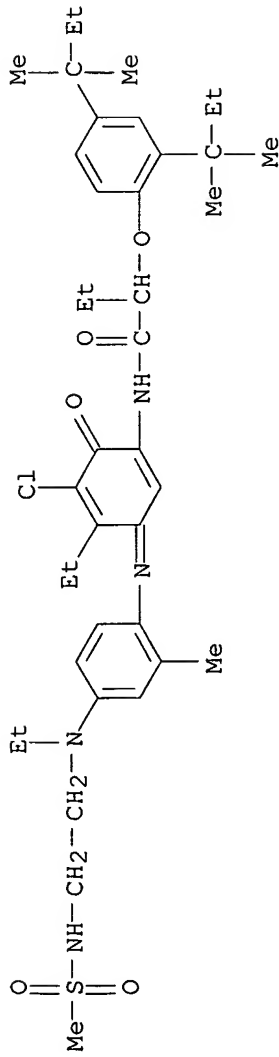
IT 118150-18-8

RL: TEM (Technical or engineered material use); USES (Uses)  
(ink composition for ink jet recording)

RN 118150-18-8 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]]- (9CI) (CA INDEX NAME)



L7 ANSWER 13 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:900443 CAPLUS <LOGINID::20060824>>  
 DOCUMENT NUMBER: 136:21063  
 TITLE: Ink jet recording composition containing cycloamine compound  
 INVENTOR(S): Naruse, Hideaki; Seto, Nobuo  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 33 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001342386	A2	20011214	JP 2000-309682	20001010
PRIORITY APPLN. INFO.:			JP 2000-95490	A 20000330
OTHER SOURCE(S):			MARPAT 136:21063	
GI				

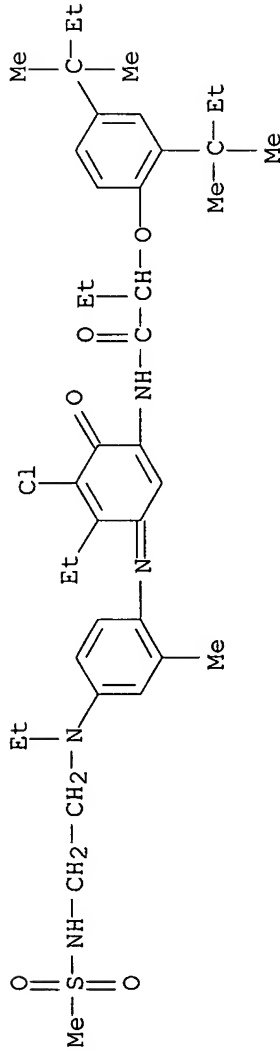
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title ink composition having good picture quality, water resistance and image fixation comprises a dye dissolved in a high-b.p. solvent and dispersed in water, and a compound I. Thus an ink made from dye II and compound III showed good printing property, and water resistance.

IT 118150-18-8

RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink jet recording composition containing cycloamine compound)

RN 118150-18-8 CAPLUS  
 CN Butanamide,  
 2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



L7 ANSWER 14 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:900441 CAPLUS <LOGINID::20060824>>  
 DOCUMENT NUMBER: 136:21062  
 TITLE: Ink composition for ink jet recording  
 INVENTOR(S): Yamada, Masato; Mikoshiba, Takashi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001342385	A2	20011214	JP 2000-251174	20000822
PRIORITY APPLN. INFO.:			JP 2000-95680	A 20000330

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title ink having good printing property, discharge stability, water and light resistance comprises a dye which is dissolved in an organic solvent (b.p.

≥150°) and emulsified, and a substituted benzene R1XR2R3R4R5R6C wherein R1-R6 are H or organic substituents, and X is O, S, or NR. Thus, an ink made from dye I and claimed compound II showed good printing property, drying, and water resistance.

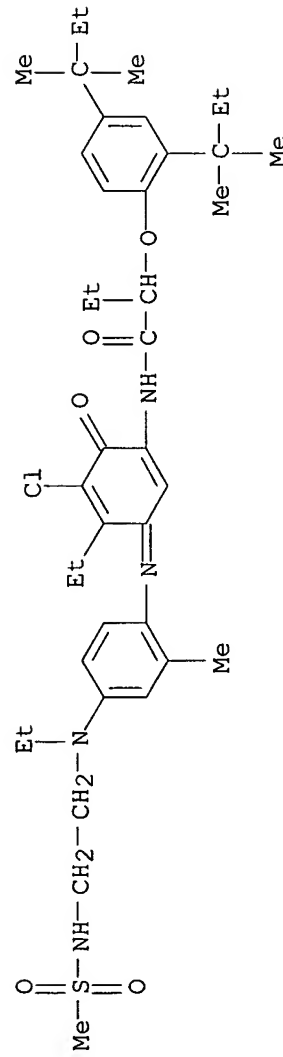
IT 118150-18-8

RL: TEM (Technical or engineered material use); USES (Uses (ink composition for ink jet recording))

RN 118150-18-8 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]]- (9CI)	(CA INDEX NAME)



L7 ANSWER 15 OF 31

ACCESSION NUMBER: 2001:874458 CAPLUS <LOGINID: 20060824>

DOCUMENT NUMBER: 136:21058

TITLE:

INVENTOR(S):

PATENT ASSIGNEE(S) :

SOURCE: Jpn. Kokai Tokkyo Koho, 56 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

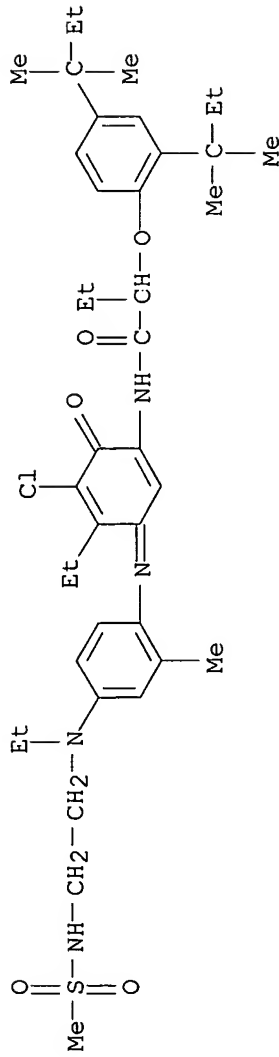
LANGUAGE: Japanese

NAME	DATE	TIME	LOCATION	REMARKS	NUM.	COUNT:
1						

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001335734	A2	20011204	JP 2000-203856	20000705
US 2003222959	A1	20031204	US 2001-800776	20010308
US 6713528	B2	20040330		
PRIORITY APPLN. INFO.:			JP 2000-78518	A 20000321





L7 ANSWER 16 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:798763 CAPLUS <<LOGINID::20060824>>  
 DOCUMENT NUMBER: 135:332619  
 TITLE: Ink-jet ink sets containing ionic polymers and oil-soluble dyes  
 INVENTOR(S): Yamanouchi, Junichi; Yamada, Makoto  
 PATENT ASSIGNEE(S): Japan  
 SOURCE: U.S. Pat. Appl. Publ., 44 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001036979	A1	20011101	US 2001-800649	20010308
JP 2002080772	A2	20020319	JP 2001-62886	20010307
PRIORITY APPLN. INFO.:			JP 2000-78531	A 20000321
			JP 2000-203857	A 20000705

OTHER SOURCE(S): MARPAT 135:332619

AB An ink-jet ink which is excellent in handling properties, odor, safety, and dispersion stability of a coloring particulate, and which shows no paper-dependency, manifests excellent color developing property and hue when printed on any type of paper, and has various excellent properties. The ink-jet ink contains a coloring composition containing a coloring particulate containing an ionic-group-containing polymer, an oil-soluble dye, and a hydrophobic high-boiling-point organic solvent having a b.p. of at least 150°, the coloring particulate being dispersed in a water-based medium. The content of the hydrophobic high-boiling-point organic solvent in the coloring composition is 25-95% with respect to a total amount of the ionic-group-containing polymer, the oil-soluble dye, and the hydrophobic high-boiling-point organic solvent.

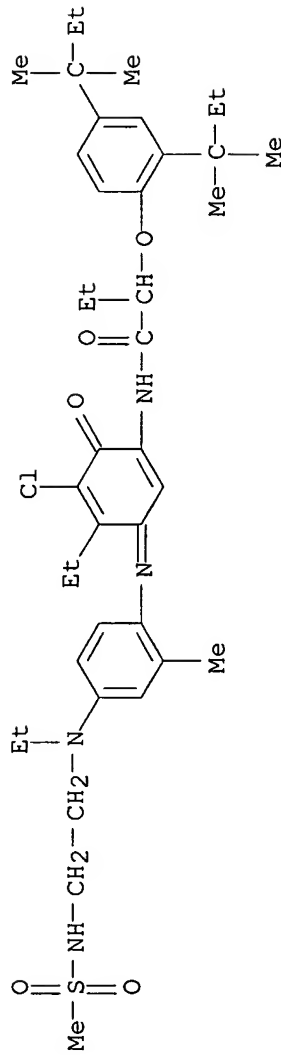
IT 118150-18-8

RL: TEM (Technical or engineered material use); USES (Uses)  
(ink-jet ink sets containing ionic polymers and oil-soluble dyes)

RN 118150-18-8 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]]- (9CI) (CA INDEX NAME)



L7 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:535542 CAPLUS <<LOGINID::20060824>>

DOCUMENT NUMBER: 131:305050

TITLE:

The effect of polymeric addenda on dark fading stability of cyan indoaniline dye

AUTHOR(S): Takahashi, Osamu; Yoneyama, Hiroyuki; Aoki, Kozo; Furuya, Kazuhiko

CORPORATE SOURCE: Ashigara Research Laboratories, Fuji Photo Film Co., LTD, Kanagawa, 250-0193, Japan

SOURCE: IS&T's PICS Conference, Annual Conference [of the Society for Imaging Science and Technology], 51st, Portland, Oreg., May 17-20, 1998

(1998), 329-331. Society for Imaging Science and Technology: Springfield, Va.

CODEN: 67ZGAU

DOCUMENT TYPE: Conference

LANGUAGE: English

AB An investigation on the heat-decomposition mechanism of indoaniline dyes suggested that preventing the reaction between dyes or between dyes and heat-decomposition

products is important to improve dark fading stability of cyan indoaniline dyes. This has led to the development of the polymer-protected coupler (PPC)

technol. incorporated in all Fujicolor Super FA papers. This paper describes the effect of polymer addenda on indoaniline dyes in terms of an assumed

mechanism for heat-decomposition of cyan indoaniline dyes and phys. properties of polymers.

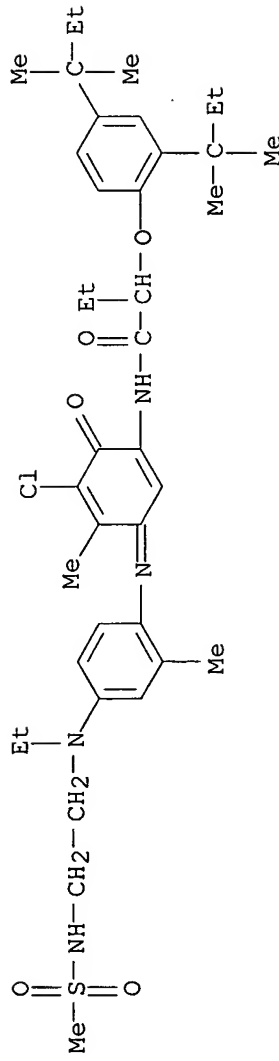
IT 111364-54-6

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(dark heat stability of photog. cyan indoaniline dye increased by addition pf polymer)

RN 111364-54-6 CAPLUS

CN Butanamide,  
 2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-3-[[4-[ethyl 2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-4-methyl-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:535531 CAPLUS <<LOGINID::20060824>>

DOCUMENT NUMBER: 131:293172

TITLE: Photophysics and photochemistry of azomethine dyes

AUTHOR(S): Berry, R. J.; Douglas, P.; Garley, M. S.; Clarke, D.; Winscom, C. J.

CORPORATE SOURCE: Chemistry Department, University of Wales Swansea, Singleton Park Swansea, SA2 8PP, UK

SOURCE: IS&T's PICS Conference, Annual Conference [of the Society for Imaging Science and

Technology], 51st, Portland, Oreg., May 17-20, 1998

(1998), 282-286. Society for Imaging Science and Technology: Springfield, Va.

CODEN: 67ZGAU

DOCUMENT TYPE: Conference

LANGUAGE: English

AB Photochem. and photophysics of azomethine dyes are characterized by: very broad and intense absorption bands, (band width  $\approx 100$  nm and  $\epsilon$

$\approx 2-5 + 104$  mol-l dm<sup>3</sup> cm<sup>-1</sup>); high photostabilities, ( $\Phi \approx 10-6$  to  $10-7$ ); very low room temperature

fluorescence quantum yields, ( $\Phi_{fl}$

$\approx 10-4$  to  $10-5$ ) which are enhanced at 77 K to  $\Phi_{fl} \approx 0.001-1.0$  depending upon the dye type; low energy

triplet states, ( $E_{\lambda}$

$\approx 94$  kJmol<sup>-1</sup>) (cyan dyes) to 200 kJmol<sup>-1</sup> (yellow dyes); short triplet lifetimes;  $\tau_{\lambda} \leq 10$  ns; syn-anti

isomerization about the

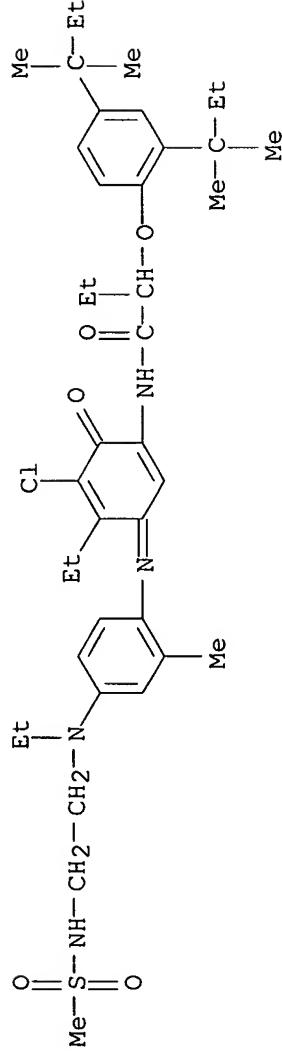
azomethine bond; and high rate consts. for phys. quenching of singlet oxygen, ( $k_q \approx 106-109$  mol-l dm<sup>3</sup> s<sup>-1</sup>).

Results from studies of two ballasted

indoaniline cyan dyes confirm this general behavior. For these cyan dyes  $\Phi_{fl} \leq 5 + 10-5$  in room

temperature di-Bu phthalate, triplet energies

are 87 ± 4 and 94 ± 4 kJmol<sup>-1</sup>, and singlet oxygen quenching rate consts. are 6.6 (± 0.1) + 109 mol<sup>-1</sup>dm<sup>3</sup>s<sup>-1</sup>.  
IT 118150-18-8  
RL: PRP (Properties)  
(photochemistry and photochem. of photog. cyan azomethine dyes)  
RN 118150-18-8 CAPLUS  
CN Butanamide,  
2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:  
IN THE RE FORMAT

26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

L7 ANSWER 19 OF 31

CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:502930 CAPLUS <<LOGINID::20060824>>

DOCUMENT NUMBER: 131:145866

TITLE: Ink-jet inks providing print with improved rub resistance

INVENTOR(S): Helling, Guenter; Herrmann, Stefan

PATENT ASSIGNEE(S): Agfa-Gevaert A.-G., Germany

SOURCE: Ger. Offen., 20 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

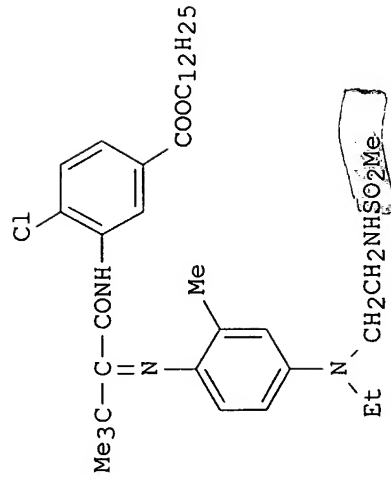
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19804123	A1	19990805	DE 1998-19804123	19980203
US 6313196	B1	20011106	US 1999-237822	19990127
JP 11286637	A2	19991019	JP 1999-25130	19990202
PRIORITY APPLN. INFO.:			DE 1998-19804123	A 19980203

GI



AB Ink-jet inks with the title property are based on dispersions containing ionic polymers loaded with dyes. A typical dispersion was manufactured by heating 72.7 g adipic acid-hexanediol-HDI-neopentyl glycol-Na 2-aminoethyl-β-aminopropionate copolymer in 550 g Me<sub>2</sub>CO 15 min at 50° with 5.45 g dye I in 80 g Me<sub>2</sub>CO, adding 220 g water, and removing the Me<sub>2</sub>CO by vacuum distillation

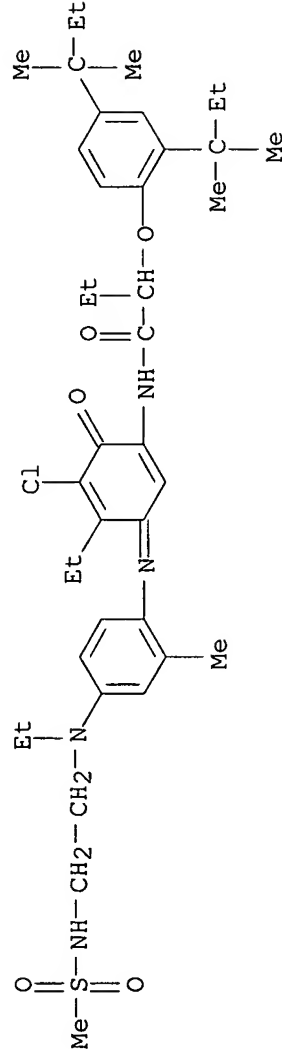
IT 118150-18-8DP, reaction products with ionomers

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (ink-jet inks containing ionomer-dye adducts for providing print with improved rub resistance)

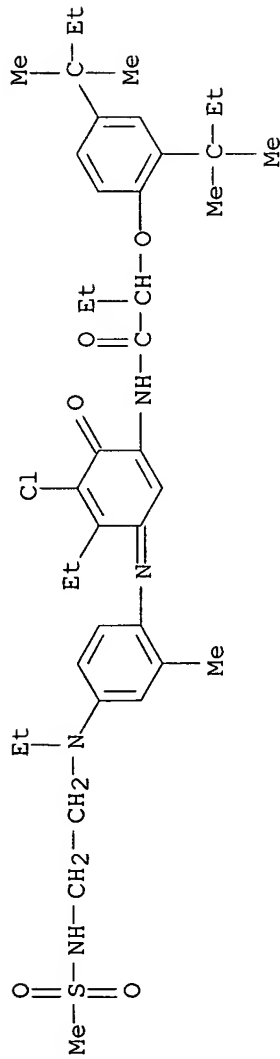
RN 118150-18-8 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



L7 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:28479 CAPLUS <<LOGINID::20060824>>  
 DOCUMENT NUMBER: 130:229838  
 TITLE: Triplet energies, singlet state properties and singlet oxygen quenching rate constants  
 and quantum yields for two cyan azomethine dyes  
 AUTHOR(S): Berry, Richard J.; Douglas, Peter; Garley, Michael S.; Jolly, Tony; Clarke, Dave;  
 Mogiestue, Helen; Walker, Helen; Winscom, Christopher  
 CORPORATE SOURCE: Department of Chemistry, University of Wales Swansea, Singleton Park, Swansea, SA2 8PP,  
 UK  
 SOURCE: Journal of Photochemistry and Photobiology, A: Chemistry (1999), 120(1), 29-36  
 CODEN: JPPCEJ; ISSN: 1010-6030  
 PUBLISHER: Elsevier Science S.A.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The triplet energies of two photog. cyan azomethine dyes with absorption maxima around 640 nm have been  
 studied using time-resolved energy transfer  
 methods and found to be 94 ( $\pm 4$ ) and 87 ( $\pm 4$ ) kJ-mol<sup>-1</sup>. The rate consts. for the quenching of singlet mol.  
 oxygen by the two dyes in ethanol are 6.5  
 ( $\pm 0.5$ ) + 109 and 6.7 ( $\pm 0.5$ ) + 109 mol<sup>-1</sup>-dm<sup>3</sup>-s<sup>-1</sup>, close to the diffusion-controlled limit. Quantum yields of  
 singlet oxygen production in  
 air-equilibrated ethanol are 3.3 ( $\pm 1.0$ ) + 10<sup>-5</sup> and  $\leq 1$  + 10<sup>-5</sup>. Fluorescence spectra of the dyes in di-Bu  
 phthalate at relatively  
 high concentration have been obtained leading to ests. of 6.9 ( $\pm 1.2$ ) + 10<sup>-5</sup> and 1.8 ( $\pm 0.5$ ) + 10<sup>-5</sup> for the  
 quantum yields of fluorescence.  
 Excited singlet state radiative and non-radiative rate consts., calculated using the Strickler Berg method,  
 for the two dyes are: 9.9 ( $\pm 0.4$ ) + 10<sup>7</sup>  
 and 1.5 ( $\pm 0.2$ ) + 1012 s<sup>-1</sup>; 8.7 ( $\pm 0.7$ ) + 10<sup>7</sup> and 5.0 ( $\pm 2.0$ ) + 1012 s<sup>-1</sup>.  
 IT 118150-18-8  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)  
 (triplet and singlet state energies and singlet oxygen quenching rate consts. for two photog. cyan  
 azomethine dyes)  
 RN 118150-18-8 CAPLUS  
 CN Butanamide,  
 2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-me  
 thylphenyl]imino]-6-oxo-1,4-  
 cyclohexadien-1-yl]]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:  
IN THE RE FORMAT

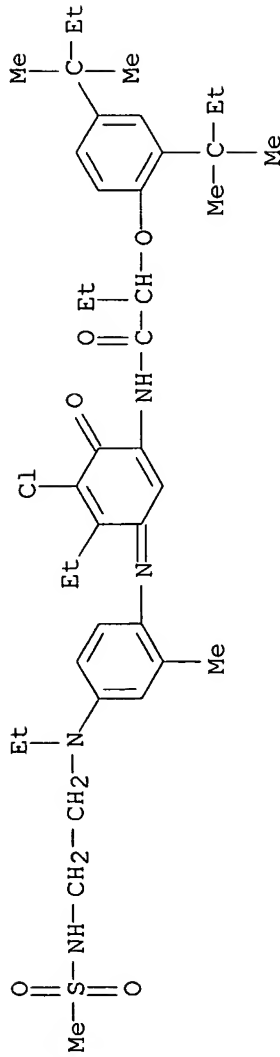
21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

L7 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1998:599882 CAPLUS <<LOGINID::20060824>>  
 DOCUMENT NUMBER: 129:267949  
 TITLE: Thermal printing material providing multicolor image  
 INVENTOR(S): Arai, Takao; Ito, Akira  
 PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10244763	A2	19980914	JP 1997-50482	19970305
			JP 1997-50482	19970305

PRIORITY APPLN. INFO.:  
 AB The title material comprises a support with coatings of  $\geq 1$  layer containing a free radical-generating agent which absorbs light to generate a free radical and a dye which is decolorized by the free radical and  $\geq 1$  layer containing a diazo compound and a coupling component which combines to the diazo compound to form a dye. The later layer may contain, in place of the above 2 components, (1) an electron-donating leuco dye and an electron-accepting color developer, (2) a colored product of the leuco dye and the color developer and a decoloring agent which decolors the colored product by heat-decoloring reaction, or (3) a diarylmethane, triarylmethane, polymethine, azomethine, indoaniline, or quinone dye and a decoloring agent which decolors the dye by nucleophilic reaction or reduction that occurs upon heating. The material provides multicolor images with high color reproducibility, storage stability, and sharpness.

IT 118150-18-8  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (dye; thermal printing material providing multicolor image)  
 RN 118150-18-8 CAPLUS  
 CN Butanamide,  
 2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-cyclohexadien-1-yl]]- (9CI) (CA INDEX NAME)



L7 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1997:602510 CAPLUS <<LOGINID::20060824>>  
 DOCUMENT NUMBER: 127:301317  
 TITLE: Heat development photosensitive material with improved lightfastness  
 INVENTOR(S): Harada, Toru; Fujiwara, Itsuo  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09230531	A2	19970905	JP 1996-60376	19960223
PRIORITY APPLN. INFO.: GI			JP 1996-60376	19960223

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title material contains a dye I (Z1, Z2 = nonmetal atoms required to form a 5 or 6- membered N-containing heterocycle which may be condensed; R1, R2 = alkyl, alkenyl, aralkyl; L = linking group composed of 5, 7 or 9 methine groups linked by conjugated double bonds; a, b, c = 0 or 1; X = anion, when X is an anion containing M in III shown below, the compound III, IV or V is not necessary) or II (R3-10 = H, alkyl, cycloalkyl, aryl, aralkyl, R3 and R4, R5 and R6, R7 and R8, R9 and R10, R4 and R5 or R8 and R9 may form a 5 or 6-membered ring), and ≥1 compound selected from LnlMm1 (III; L = ligand; M = Ni, Co, Cu, Pt, Pd, Fe, Mn, or Zn; n1 = 1-10; m1 = 1 or 2), IV (R11-14 = H or alkyl; X = anion), and V [R15 = H, halo, CONHR22, SO2NHR22, NHSO2R22, NHCOR22, halo, NHCOR22, NHSO2R22, nonmetal atoms which link each other to form an aromatic ring; R16, R17 = H, alkyl, halo, NHCOR22, NHCOR22, nonmetal atoms which link alkyl, alkoxy, OH, halo; R20, R21 = alkyl, aralkyl, atoms linking to form a heterocycle; n2 = 0-2]. The material may be used in IR laser exposure. The dyes, which remains after heat-development, shows good lightfastness, and the material gives clear images with high sharpness. Thus, a PET film was coated with an antihalation layer containing the dye and the decoloration-preventing agent on the back side, and coated with a photosensitive emulsion layer and a protective layer successively on the front side to give a heat development photosensitive film.

IT 111364-54-6

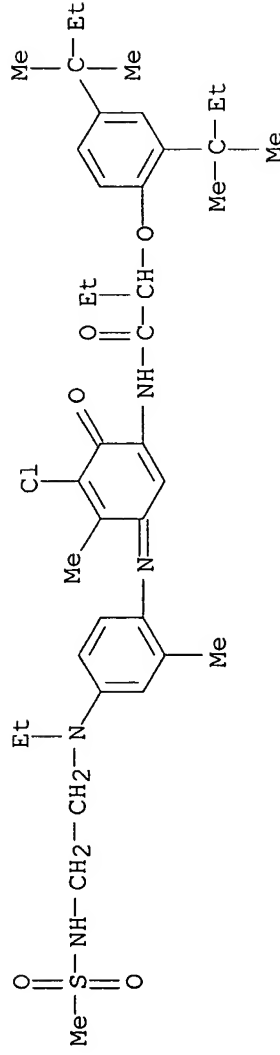
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(heat-developable photosensitive material containing cyanine or squarylium IR-absorbing dye and decoloration-preventing agent)

RN 111364-54-6 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-3-[[4-[ethyl{2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-4-methyl-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



L7 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1995:391383 CAPLUS <<LOGINID::20060824>>  
 DOCUMENT NUMBER: 123:97640  
 TITLE: A study on the electrochemical behavior of imaging dye in color photography; oxidation and leuco dye formation mechanisms of four currently used dyes

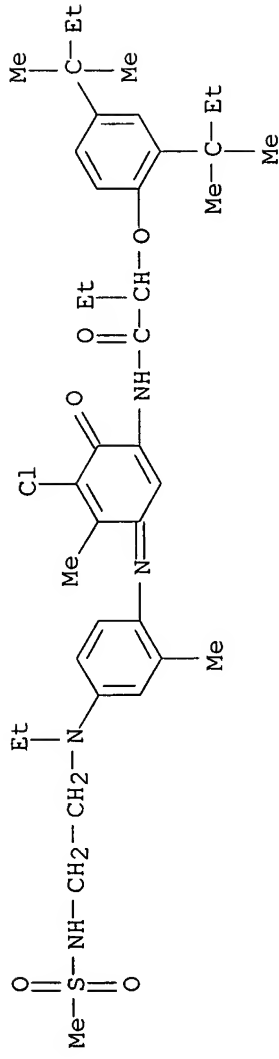
AUTHOR(S): Miwa, Takuji; Ueno, Masahide; Takeda, Tsuyoshi  
 CORPORATE SOURCE: Remote Sensing and Image Research Center, Chiba University, Chiba, 263, Japan  
 SOURCE: Nippon Shashin Gakkaishi (1994), 57(5), 323-32  
 CODEN: NSGKAP; ISSN: 0369-5662

DOCUMENT TYPE: Journal  
 LANGUAGE: Japanese

AB The electrochem. behavior of four imaging dyes with azomethine group developed recently and used in current color photog. materials is investigated in acetonitrile and this including methanol as proton donor by cyclic voltammetry and rotating disk voltammetry. Two anodic waves are observed; the first wave is quasi-reversible wave of the first step and the second is almost irreversible or poor reversible wave of the second step. The behavior of oxidation does not change basically by addition of methanol. In acetonitrile, almost irreversible or poor reversible reduction wave is observed. In addition to this wave, oxidation wave of leuco dye is also observed weakly. It is estimated that in this case the leuco dye is produced by reaction of anion radical of the dye with water existed as impurity. This is confirmed by the following fact. By addition of methanol, the reduction wave becomes broader and irreversible, and correspondingly oxidation wave of leuco dye becomes stronger. Formation mechanism of the leuco dye is estimated as the following. An anion radical of the dye is produced by one electron reduction and changes to neutral radical through reaction with proton. The neutral radical is also reduced to an anion. Then the anion reacts with proton to produce leuco dye. In other words, it is estimated that the formation mechanism of leuco dye is ECEC type two electron process.

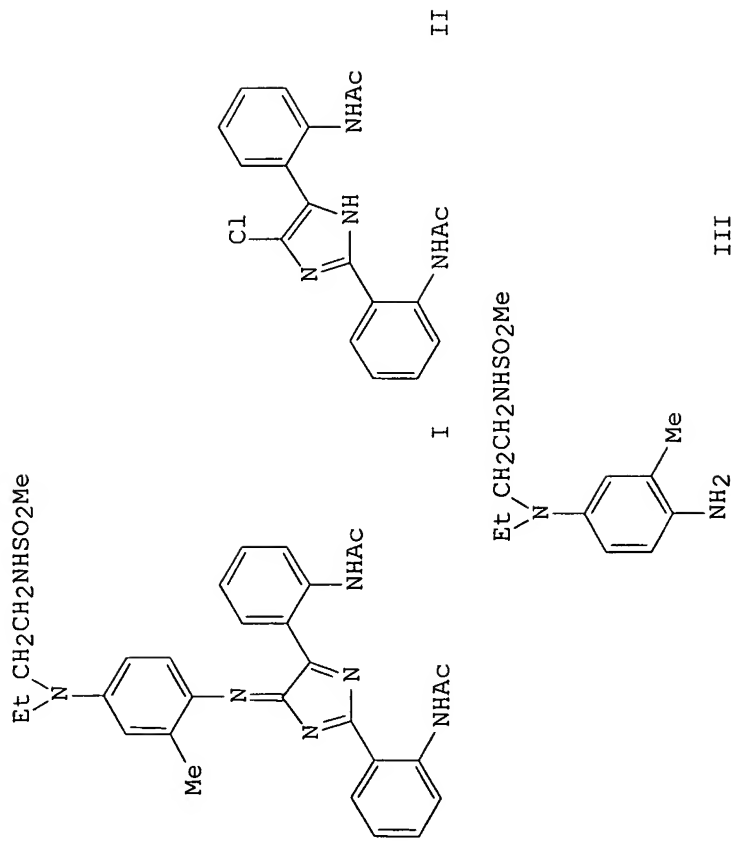
IT 111364-54-6  
 RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)  
 (electrochem. behavior of photog. dyes with azomethine group)

RN 111364-54-6 CAPLUS  
 CN Butanamide,  
 2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-4-methyl-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



L7 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1992:216347 CAPLUS <<LOGINID::20060824>>  
 DOCUMENT NUMBER: 116:216347  
 TITLE: Manufacture of azomethine and indoaniline dyes  
 INVENTOR(S): Ishige, Osamu; Masukawa, Toyooki; Uchida, Taku; Nakayama, Noritaka  
 PATENT ASSIGNEE(S): Konica Co., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03275767	A2	19911206	JP 1990-74973	19900325
JP 2895152	B2	19990524	JP 1990-74973	19900325
PRIORITY APPLN. INFO.:				
GI				



AB The dyes (e.g., I) are manufactured by anodic oxidation of p-phenylenediamine, aminophenol, or their derivs. in the presence of a coupler and a base. Thus, electrolysis of a DMF solution of II 1.84, III 2.62, Et3N 2.5, and Et4NBr 0.5 g with a Pt anode and a Pt cathode gave 2.6 g I with  $\lambda_{\text{max}}$  664 nm (MeOH).

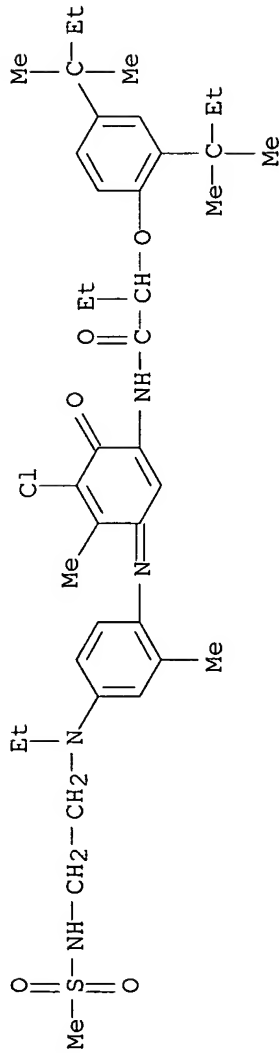
IT 111364-54-6P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(cyan dye, preparation of, anodic oxidation and coupling of phenylenediamine derivative in)

RN 111364-54-6 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-4-methyl-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)

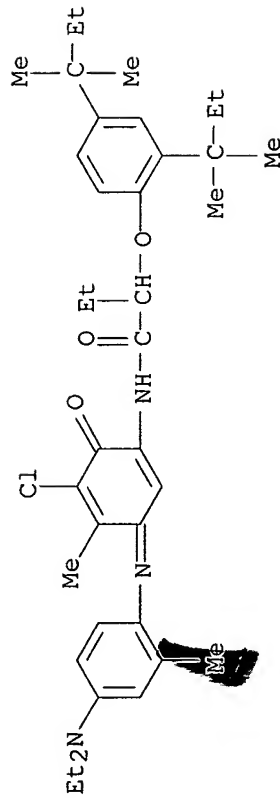


L7 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1992:117250 CAPLUS <LOGINID::20060824>>  
 DOCUMENT NUMBER: 116:117250  
 TITLE: Photoresist dichromate composition containing gelatin coated particles  
 INVENTOR(S): Bagchi, Pranab; Reithel, Raymond F.; Chen, Tsang J.; Evans, Steven  
 PATENT ASSIGNEE(S): Eastman Kodak Co., USA  
 SOURCE: U.S., 25 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5055379	A	19911008	US 1990-495871	19900319
			US 1990-495871	19900319

PRIORITY APPLN. INFO.:  
 AB A neg.-working photoresist composition comprises a mixture of (a) dye-loaded or dye-precursor-loaded polymeric particles individually covered with a layer of gelatin that is covalently bonded thereto, and (b) a radiation-sensitive dichromate. The composition is useful in the preparation of continuous tone dyed imaging elements such as color filter arrays for use in solid state color image sensing devices.

IT 129578-41-2  
 RL: USES (Uses)  
 (polymer loaded with, for photoresist)  
 RN 129578-41-2 CAPLUS  
 CN Butanamide,  
 2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-3-[[4-(diethylamino)-2-methylphenyl]imino]-4-methyl-6-oxo-1,4-cyclohexadien-1-yl]- (9CI)  
 (CA INDEX NAME)



L7 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1990:542375 CAPLUS <LOGINID::20060824>>  
 DOCUMENT NUMBER: 113:142375

TITLE: Photoimaging process

INVENTOR(S): Yabuki, Yoshiharu

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02051157	A2	19900221	JP 1988-201771	19880812
			JP 1988-201771	19880812

PRIORITY APPLN. INFO.:  
 AB Photoimaging is effected by using a photosensitive material containing Ag halide, a reducing agent, a polymerizable compound, a dye, and water insol. basic metal compound (I) or a compound (II) capable of releasing a base upon reacting with the metal ion present in I, imagewise exposing, initiating development by raising the pH via the reaction between I and II in the presence of water and the compound selected from I or II not present in the photosensitive material, immobilizing the dye by polymerization of the polymerizable compound; and pressure transferring the dye present in the unpolymd. areas onto a receptor sheet, the solubility of the dye in 1N NaOH being  $\leq 0.1$  g/100 mL at 25°.

IT 129578-41-2

RL: USES (Uses)

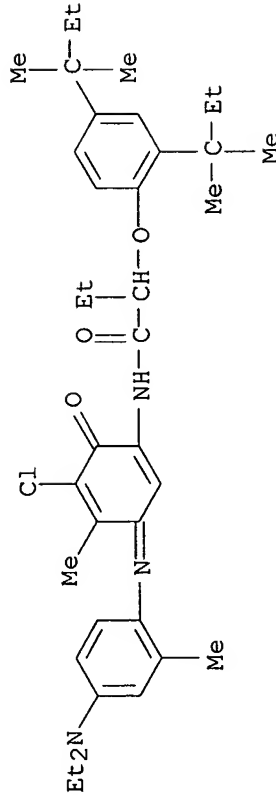
(dye, photoimaging process using)

RN 129578-41-2 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-3-[[4-(diethylamino)-2-methylphenyl]imino]-4-methyl-6-oxo-1,4-cyclohexadien-1-yl]- (9CI)

(CA INDEX NAME)



L7 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1989:125234 CAPLUS <<LOGINID::20060824>>  
DOCUMENT NUMBER: 110:125234

TITLE: Silver halide color photographic material with improved graininess

INVENTOR(S): Michigami, Kenji; Iwamuro, Masao

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

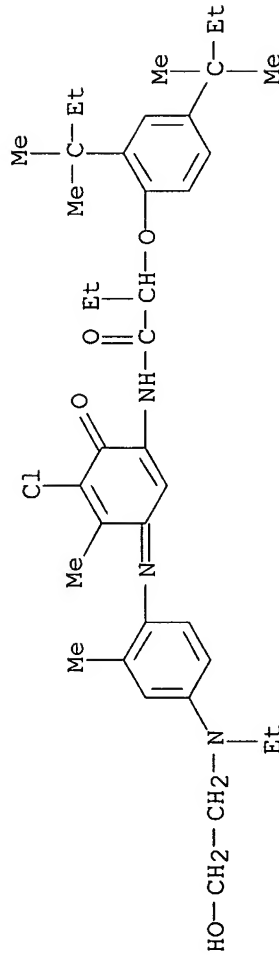
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63186241	A2	19880801	JP 1987-17769	19870128
JP 2550334	B2	19961106	JP 1987-17769	19870128

PRIORITY APPLN. INFO.:  
AB In the title photog. material which comprises ≥2 Ag halide emulsion layers having the same color but different sensitivities, and in which an adjacent Ag halide emulsion layer near the support contains a diffusive DIR (development inhibitor releaser), a nonphotosensitive interlayer is placed between the above adjacent Ag halide emulsion layers and the interlayer contains a dye having the same spectrum absorption range of the above emulsion layers.

IT 119513-38-1  
RL: USES (Uses)  
(nonphotosensitive interlayer containing, photog. material using)

RN 119513-38-1 CAPLUS

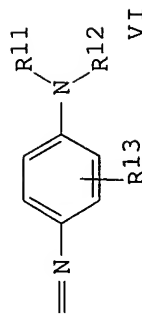
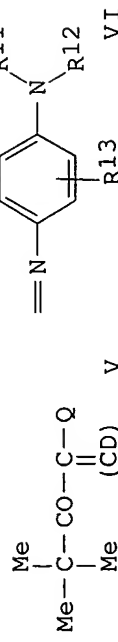
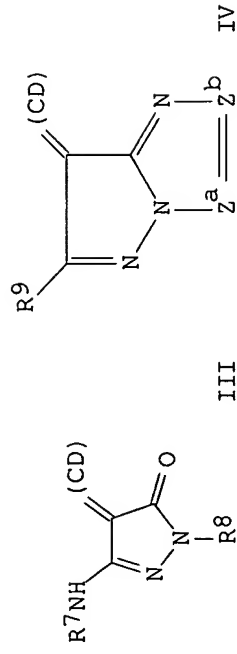
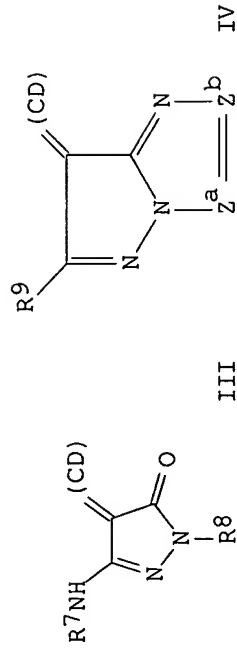
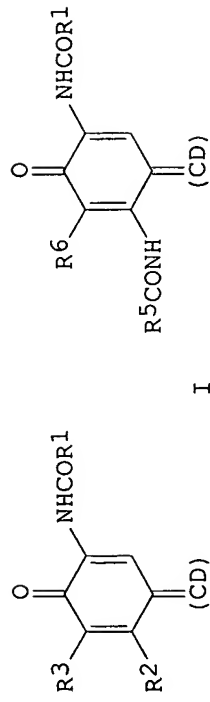
CN Butanamide,  
 2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-3-[[4-[ethyl (2-hydroxyethyl)amino]-2-methylphenyl]imino]-4-meth-  
 yl-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



L7 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1989:31446 CAPLUS <LOGINID::20060824>>  
 DOCUMENT NUMBER: 110:31446  
 TITLE: Color photographic seal print having high quality and durability  
 INVENTOR(S): Shiba, Keisuke; Sakanoe, Seiki  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63104050	A2	19880509	JP 1986-251481	19861022
JP 2639425	B2	19970813	JP 1986-251481	19861022

PRIORITY APPLN. INFO.:  
 GI



AB In a seal print (sic) comprising an imagewise printed color photog. paper (50-200  $\mu$ m thick) having an adhesive layer on its reverse side, the photog.

paper has cyan images of dye I or II [R1, R4, R5 = aliphatic, aromatic, heterocyclic, aromatic amino, heterocyclic amino; R2 = aliphatic; R3, R6 = H, halo, aliphatic,

aliphatic oxy, acylamino; R2 and R3, and R5 and R6 may form 5-7 membered ring together; and CD = moiety of an oxidized aromatic primary amine developing agent],

magenta images of dyes III or IV [R7, R6 = Ph; R9 = H, substituent; Za, Zb = CH, CR10, N; and R10 = substituent], and a yellow image of dyes V [Q =

N-phenylcarbamoyle]. CD is represented by VI (R11, R12 = alkyl; and R13 = H, substituent).

IT 118150-18-8

RL: USES (Uses)

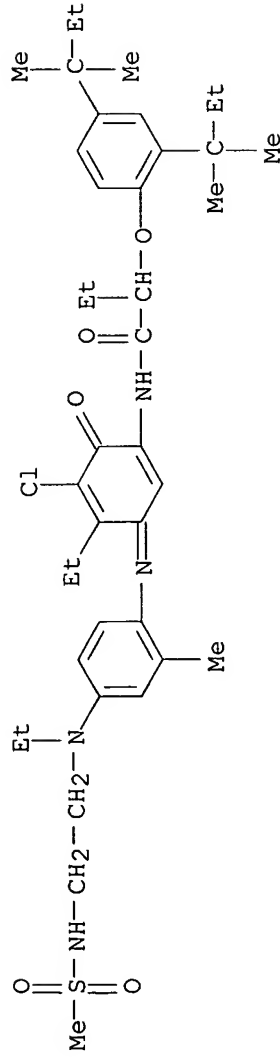
(cyan dye, color seal prints with images from)

RN 118150-18-8 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-4-ethyl-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-6-oxo-1,4-

cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



L7 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1988:464186 CAPLUS <<LOGINID::20060824>>  
 DOCUMENT NUMBER: 109:64186  
 TITLE: Silver halide photographic material with high covering power and neutral tone  
 INVENTOR(S): Iwasaki, Nobuyuki; Ono, Shigeru; Miyasaka, Nobuaki; Adachi, Keiichi; Yamaguchi, Jiro;  
 Kamiyama, Yoichiro  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62276539	A2	19871201	JP 1986-118850	19860523
JP 07078607	B4	19950823		
PRIORITY APPLN. INFO.:			JP 1986-118850	19860523

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB In a photog. material having  $\geq 1$  supported Ag halide emulsion layer, (1) the covering power of the emulsion layer is  $\geq 6.0$ , and (2) a dye with a peak absorption between 520 and 560 nm and another dye with a peak between 570 and 600 nm are incorporated together in the emulsion layer and/or another layer in such a concentration that the optical d. due to the dyes after processing is  $\leq 0.03$ . It is a relatively low cost sensitized material, provides an

image with high covering power and good neutral tone, and is suitable for radiog. use. Thus, an x-ray film, prepared from a tabular grain emulsion [Ag(Br,I), 2.0 μm in diameter and aspect ratio of 16], the dye I (peak absorption 545 nm), and the dye II (peak absorption 62 nm), showed excellent characteristics.

IT 111364-54-6

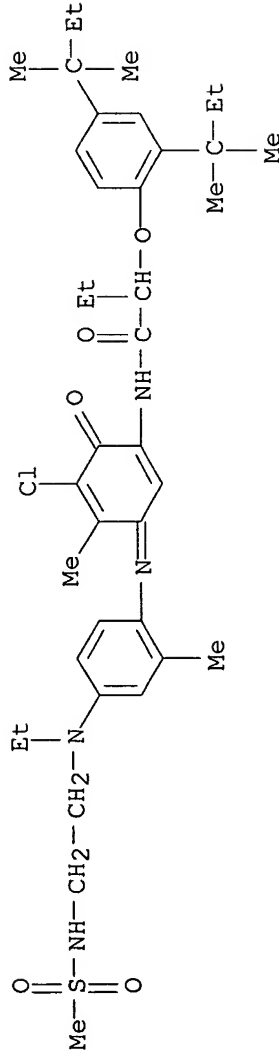
RL: TEM (Technical or engineered material use); USES (Uses)

(photog. material containing, with high covering power and neutral tone)

RN 111364-54-6 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-3-[[4-(ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-4-methyl-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



L7 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1988:122021 CAPLUS <<LOGINID::20060824>>  
DOCUMENT NUMBER: 108:122021  
TITLE: Photoimaging process involving immobilization of dyes by polymerization  
INVENTOR(S): Nakamura, Taku; Takeda, Takashi  
PATENT ASSIGNEE(S): Fujii Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62187346	A2	19870815	JP 1986-29987	19860213
JP 06019574	B4	19940316		

PRIORITY APPLN. INFO.:

JP 1986-29987

19860213

AB The title imaging process involves (1) imagewise exposure of a photosensitive material containing Ag halides, a reducing agent, a polymerizable compound, and a dye or pigment to form a Ag halide latent image, (2) development during or after the exposure to polymerize the monomer in the latent image area and to immobilize the dye or the pigment, and (3) pressing the developed material onto a receptor to transfer the mobile dye on the pigment in the unhardened areas to form a colored image on the receptor. The development is preferably effected by heating.

IT 111364-54-6

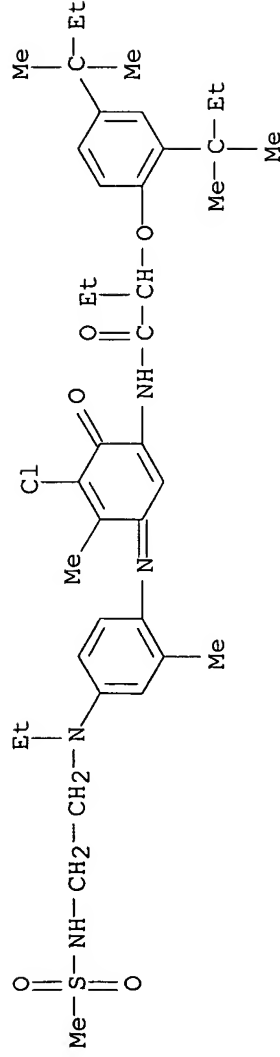
RL: USES (Uses)

(photothermog. photosensitive materials containing)

RN 111364-54-6 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-3-[[4-[ethyl 2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-4-methyl-6-oxo-1,4-cyclohexadien-1-yl]- (9CI) (CA INDEX NAME)



L7 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:625775 CAPLUS <<LOGINID::20060824>>

DOCUMENT NUMBER: 107:225775

TITLE: Study on fading of color photographic images (III). Polarographic analysis of reductive fading reaction of acylaminated derivatives of

N-[2'-methyl-4'-(N-ethyl-N-β-methylsulfonylamidoethyl)-aminophenyl]-1,4-quinonemonoimine

AUTHOR(S): Wang, Jindi; Miyagawa, Toshio; Shirai, Yasuo; Shimizu, Youko

CORPORATE SOURCE: East China Inst. Chem. Technol., Shanghai, Peop. Rep. China

SOURCE: Nippon Shashin Gakkaishi (1987), 50(3), 183-7

CODEN: NSGKAP; ISSN: 0369-5662

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB The effect was studied of substituent groups of 2-acylaminophenol couplers on the dark stability of 3 kinds of quinonemonoimine dyes by polarog. anal.

The dyes were prepared by oxidative coupling of CD-3 developing agent with the 2-acylamino-phenols. Polarographic determination of the dyes were carried out in a mixture of EtOH and Britton-Robinson buffers (1.5:1 in volume ratio) as the supporting electrolyte at  $20^\circ \pm 0.2^\circ$ , bubbled with N gas. Exptl. data showed that 2 protons took part in the fading reaction of these dyes. Half-wave potential values of these dyes correlated with their stability. The effect of substituent groups of these dyes on the half-wave potentials is discussed.

IT 111364-54-6

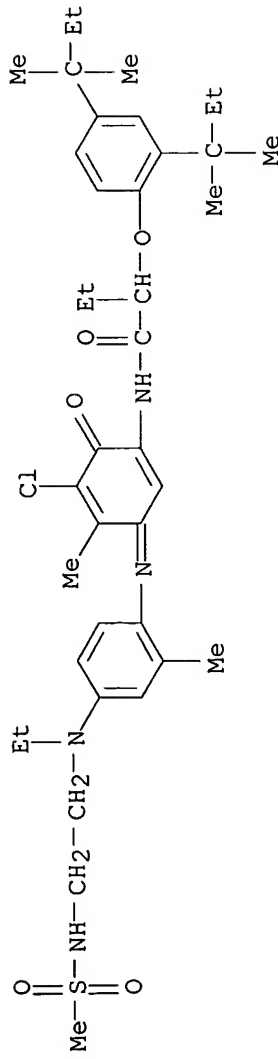
RL: USES (Uses)

(fading of color photog. images from, polarog. anal. of)

RN 111364-54-6 CAPLUS

CN Butanamide,

2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[5-chloro-3-[[4-[ethyl[2-[(methylsulfonyl)amino]ethyl]amino]-2-methylphenyl]imino]-4-methyl-6-oxo-1,4-cyclohexadien-1-yl]]- (9CI) (CA INDEX NAME)



BRS	S22	2318	(azamethine or azomethine) and (bead or particle)	USPAT	8/22/2006 16:49
BRS	S23	798	(azamethine or azomethine) and (bead)	USPAT	8/23/2006 16:47
BRS	S15	274	azamethine or azomethine and S14	USPAT	8/22/2006 15:34
BRS	S17	87	gelatin with (bead or microsphere) same substrate	USPAT	8/22/2006 16:09
BRS	S21	28	gelatin with (particle) same substrate and chromophore	USPAT	8/22/2006 16:50
BRS	S24	14	(gelatin with (particle) same substrate and chromophore) and array	USPAT	8/22/2006 16:51
BRS	S14	7	US-5412087-\$.DID. OR US-5489678-\$.DID. OR US-5981180-\$.DID. OR	USPAT	8/22/2006 16:07
BRS	S20	5	gelatin with (bead or microsphere) same substrate and chromophore	USPAT	8/22/2006 16:11
BRS	S18	3	gelatin with (bead or microsphere) same substrate same dye	USPAT	8/22/2006 16:09
BRS	S25	1	4880432.pn.	USPAT	8/24/2006 10:57
BRS	S16	0	(azamethine or azomethine) and S14	USPAT	8/22/2006 16:49
BRS	S19	0	gelatin with (bead or microsphere) same substrate same chromophore	USPAT	8/22/2006 16:09
BRS	S7	8902	azamethine or azomethine	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	8/22/2006 14:53
BRS	S8	2863	gelatin and S7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	8/22/2006 14:53
BRS	S9	207	(array or microarray or chip or biochip) and S8	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	8/22/2006 14:54
BRS	S10	169	(array or microarray or biochip) and S8	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	8/22/2006 14:55
BRS	S12	169	(array) and S8	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	8/22/2006 14:55
BRS	S13	12	US-5412087-\$.DID. OR US-5489678-\$.DID. OR US-5981180-\$.DID. OR	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	8/22/2006 15:33
BRS	S2	6	512226.pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	8/22/2006 13:51
BRS	S3	6	5122611	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	8/22/2006 13:54
BRS	S4	4	5260257.pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	8/22/2006 14:10
BRS	S1	3	20030096253	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	8/22/2006 13:51
BRS	S6	3	6605403.pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	8/22/2006 15:33
BRS	S5	2	GENJIMA.in. and MATSUURA.in. and MOCHIZUKI.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	8/22/2006 14:13
BRS	S11	2	(microarray or biochip) and S8	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	8/22/2006 14:55